

CLAIM AMENDMENTS

1           1. (Currently amended) An apparatus for detecting brain  
2     electrical potentials on a patient, comprising:

3           a breathing mask;

4           a stiff tubular nonround member extending upwardly from  
5     said breathing mask and for supplying gas to said breathing mask;

6           [[with]] an electrode device which can be applied in the  
7     forehead region of the patient on said tubular member, wherein the  
8     electrode device [[is]] being arranged on a forehead support  
9     element of an elastomeric material which co-operates with [[a]] the  
10    breathing mask device in such a way that an application position of  
11    the electrode device is established in conjunction with the  
12    application position of the breathing mask device, forehead support  
13    element being transverse to said tubular member and having free  
14    ends on opposite sides of a central portion, said electrode device  
15    including at least [[two]] one electrode element[[s]] on each of  
16    said ends adapted to bear on the forehead region of the patient  
17    when said breathing mask device is on the face of the patient and  
18    another electrode element on said central region bearing on the  
19    forehead region, said breathing mask device having a seal engaging  
20    the face of the patient around a nose and mouth region, a cavity  
21    surrounded by said seal and a drawn-in region receiving the nose of  
22    the patient and attached to the seal, ~~the forehead support element~~  
23    ~~extending from the breathing mask device~~, the electrode elements

24 being coupled to a signal processing device for processing brain  
25 signals.

2. Canceled

3. Canceled

1 4. (Previously presented) An apparatus as set forth in  
2 claim 1 wherein the forehead support element is formed in one piece  
3 with a mask base member of the breathing mask device.

5.-7. Canceled

1 8. (Previously presented) An apparatus as set forth in  
2 claim 1 wherein said electrode elements are mounted on an  
3 application surface to yield in a direction substantially  
4 perpendicular to said application surface.

9. Canceled

1 10. (Previously presented) An apparatus as set forth in  
2 claim 1 wherein the signal processing device is integrated into the  
3 forehead support element.

1 11. (Previously presented) An apparatus as set forth in  
2 claim 9 wherein the signal processing device is provided with a

3 data transmission device for the cord-less transmission of the  
4 processed signals to a data processing device.

1 12. (Currently amended) A breathing mask arrangement  
2 for feeding a respiration gas to a patient under an increased  
3 pressure, comprising:

4 a mask member which engages over the nose region of the  
5 patient [[,]] ;

6 a stiff tubular nonround member extending upwardly from  
7 said mask member;

8 a sealing device for sealing off an inner region of the  
9 mask with respect to the ambient atmosphere, and

10 a forehead support element of an elastomeric material for  
11 supporting the mask member in the forehead region of the patient,  
12 said forehead support element having at least two electrodes said  
13 forehead support element being transverse to said tubular member  
14 and having free ends on opposite sides of a central portion, said  
15 forehead support element having at ~~least two~~ an electrode[[s]] on  
16 each of said ends and another electrode in said central region  
17 adapted to press against said forehead region for detecting brain-  
18 electrical potentials.

13. Canceled.

1           14. (previously presented) The arrangement defined in  
2 claim 12 wherein the mask member is formed from an elastomer  
3 material.

1           15. (previously presented) The arrangement defined in  
2 claim 12 wherein the forehead support element and the mask member  
3 are integral.

1           16. (currently amended) The arrangement defined in  
2 claim 12 wherein the mask member and the forehead support element  
3 are adapted to the individual contour of the face of the patient by  
4 virtue of stiffening with a stiffening device which extends into  
5 the forehead support element and is formed by said tubular member.

1           17. (Currently amended) An apparatus for detecting  
2 electrical potentials in the forehead region of a patient, in  
3 particular for determining sleep stages, comprising:

4           a breathing mask adapted to fit over a mouth and nose of  
5 the patient; [[and]]

6           an electrode device having at least [[two]] three  
7 electrode elements directly engageable with the forehead region  
8 [[,]] i

9           a measuring circuit arrangement for producing measurement  
10 data in accordance with the electrical potentials detected by the  
11 electrode device, the measuring circuit arrangement being  
12 integrated into a forehead support element [[,]] i and

13           a signal transmission device for ~~cord-less~~ wireless  
14   transmission of the measurement data produced by the measuring  
15   circuit arrangement the measuring circuit arrangement having a data  
16   compression device for forwarding a compressed data set to the  
17   signal transmission device.

18.   Canceled

1           19.   (Currently amended)   A device for detecting  
2   electrical potentials in the forehead region of a patient, in  
3   particular for determining sleep stages, comprising:

4           a breathing mask adapted to fit over a mouth and nose of  
5   the patient; [[and]]

6           an electrode device fixed to the breathing mask and  
7   having at least two electrode elements directly engageable with the  
8   forehead region [[,]] ;

9           a measuring circuit arrangement for producing measurement  
10   data in accordance with the electrical potentials detected by the  
11   electrode device, ~~characterized in that~~ the measuring circuit  
12   arrangement [[is]] being integrated into a forehead support element  
13   ~~, and there is provided ;~~

14           a measurement data recording device for recording the  
15   measurement data produced by the measuring circuit arrangement, the  
16   measurement data recording device is formed by an approximately  
17   postage stamp-size memory card element which is releasably fitted.

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20. Canceled.